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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/820,134 | 04/08/2004 | Han Jun Sung | 1594.1364 | 6666 |

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EXAMINER

EARLY, MICHAEL JACOBY

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3744

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/820,134 | | SUNG ET AL. | |
| | Examiner | | Art Unit | |
| | Michael J. Early | | 3744 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishikawa (U.S. 4,648,378).

Regarding claim 1, Nishikawa discloses:

- a heating unit (3 – gas burner) generating heat (inherent use of component);
- a grilling unit (2 – rectangular griddle) provided above the heating unit (as seen in Figure 3);
- an air cooling unit (7 – electric-powered fan) connected (via fluid communication) to the grilling unit (see col. 2, lines 47-55; Figures 2, 3).

Regarding claim 13, Nishikawa discloses:

- a housing (23 – top board) having at least one recess on an upper portion of the housing (as seen in Figure 3);
- a grill cooker (2 – rectangular griddle) removably seated in the at least one recess (see col. 1, lines 58-60; Figure 3);
- a heating unit (3 – gas burner) generating heat (inherent use of component);
- a grilling unit (2 – rectangular griddle) provided above the heating unit (as seen in Figure 3);
- an air cooling unit (7 – electric-powered fan) connected (via fluid communication) to the grilling unit to cool the grilling unit using air (see col. 2, lines 47-55; Figure 3).

With regards to those limitations that are functional recitations, a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the *structural* limitations of the claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

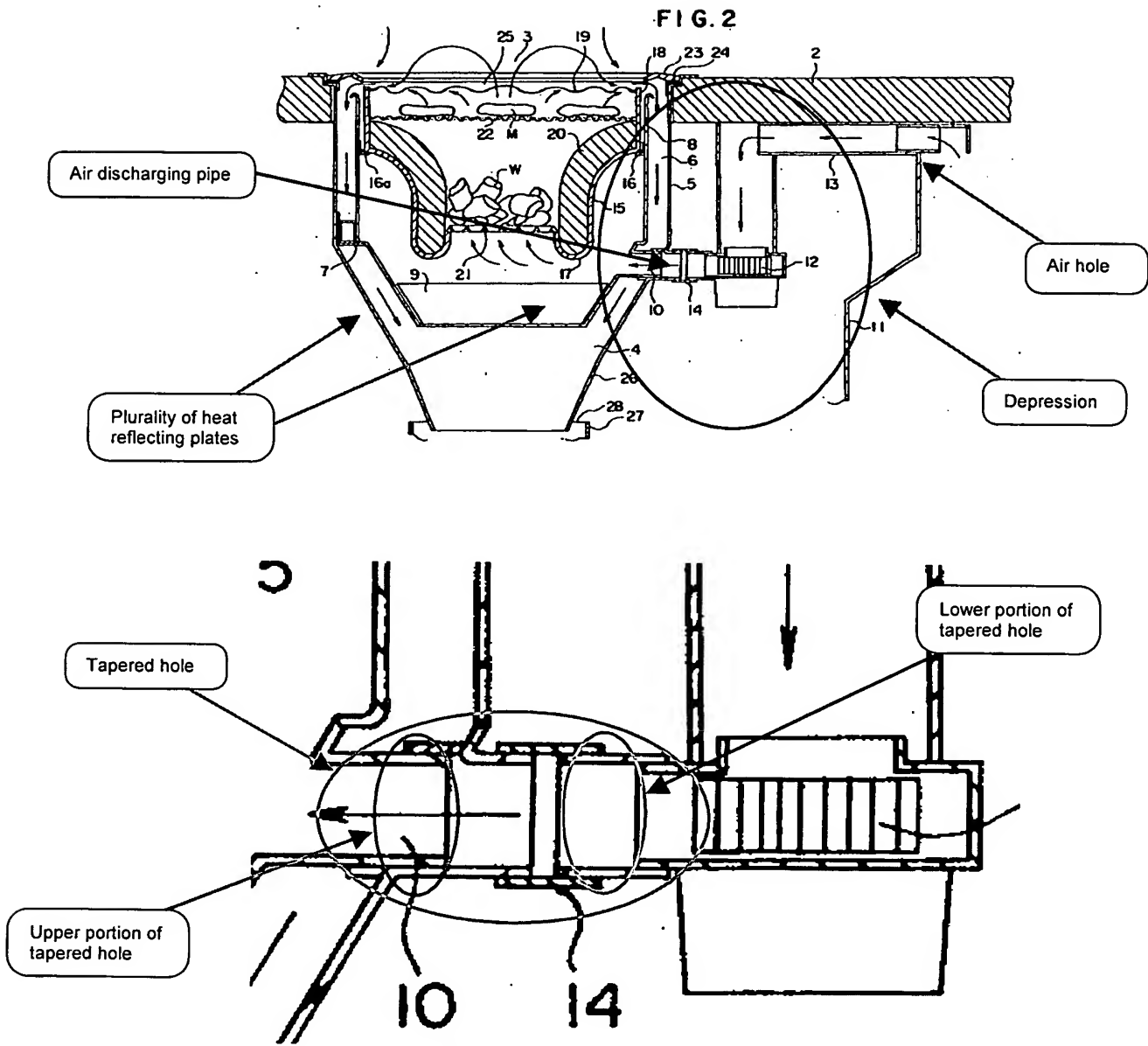
Claims 1-7, 10-12 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (U.S. 4,813,397) in view of Nishikawa.

Regarding claims 1-7 and 10-12, Yamada discloses:

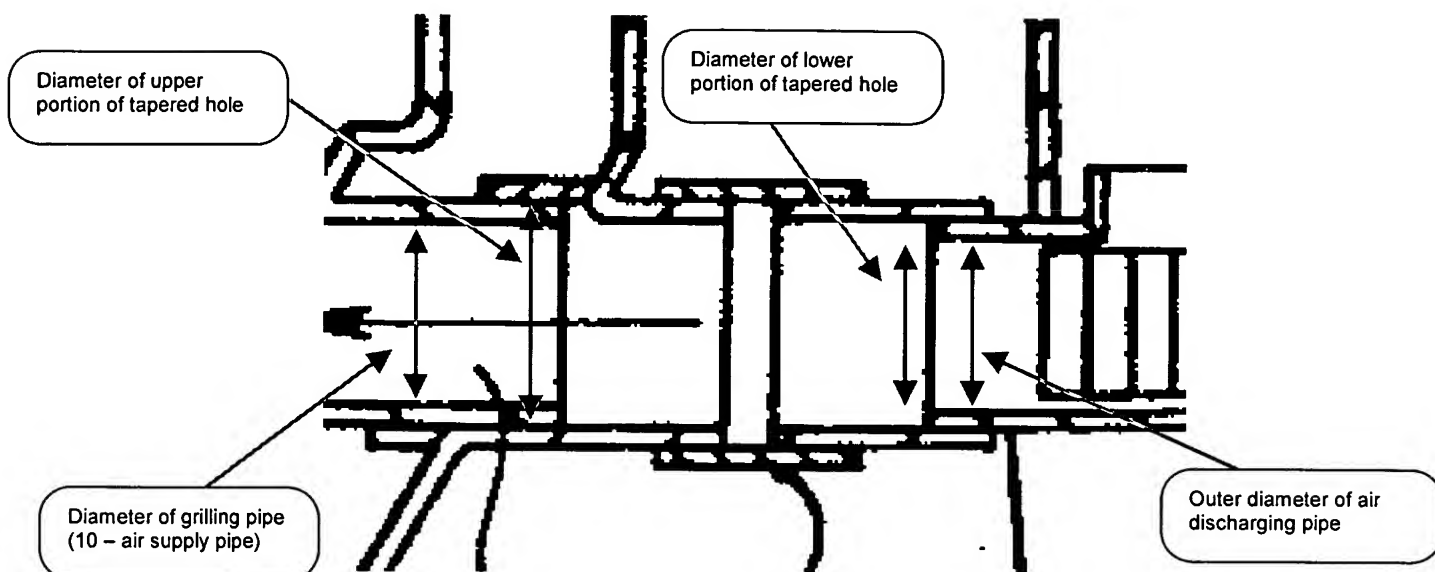
- a heating unit (W – charcoal) generating heat (obvious use of component);
- a grilling unit (22 – gridiron or grill) provided above the heating unit, with food (M – broiling meat) (as seen in Figure 2);
- a grilling pipe (10 – air supply pipe);
- the air cooling unit comprises a blowing fan (12 – controllable blower) to blow air into the grilling pipe (as seen in Figure 2);
- the grilling pipe has an inlet at one end and an outlet at another end thereof (as seen in Figure 2);
- an air discharging pipe (as seen in the illustration of Figure 2 below) to connect the blowing fan to the inlet of the grilling pipe, the air entering the grilling pipe by the blowing fan blowing air into the air discharging pipe and being discharged to an area outside of the grilling pipe through the outlet of the grilling pipe (as seen in Figure 2);
- a cabinet (5 – outer box) that is open at a top thereof to form an opening (as seen in Figure 1);
- the cabinet contains the heating unit (as seen in Figure 2);
- the grilling unit is seated on the opening of the cabinet (as seen in Figures 1 and 2);
- the air cooling unit is provided on an outer surface of the cabinet (as seen in Figure 2);
- a connection member (14 – connecting pipe) provided on an upper portion of the cabinet to connect the air discharging pipe to the inlet of the grilling pipe (as seen in Figure 2);

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- the connection member comprises a tapered hole (as seen in the first partial illustration of Figure 2 below) that is tapered in a direction from a top to a bottom of the connection member, the inlet of the grilling pipe being connected to an upper portion of the tapered hole (as seen in the first partial illustration of Figure 2 below), and the air discharging pipe being connected to a lower portion of the tapered hole (as seen in the first partial illustration of Figure 2 below) to allow the grilling pipe to be removably connected to the air discharging pipe using the connection member (inherent);
- a frame (8 – inner box) that is provided on an upper portion of the grilling pipe along an edge of the grilling pipe (as seen in Figure 2);
- the outlet of the grilling pipe is placed at a predetermined position of the frame (as seen in Figure 2);
- a grease collecting unit (9 – dust pan), provided in the cabinet under the grilling unit (as seen in Figure 2);
- the heating unit comprises a plurality of heating units (there is a plurality of charcoal pieces) that are respectively arranged on opposite side surfaces of the cabinet (as seen in Figure 2), and the grease collecting unit comprises a plurality of heat reflecting plates that face the heating units (as seen in the illustration of Figure 2 below);
- the upper portion of the tapered hole has a diameter greater than an outer diameter of the grilling pipe (as seen in the second partial illustration of Figure 2 below), the lower portion of the tapered hole has a diameter less than the outer diameter of the grilling pipe (as seen in the second partial illustration of Figure 2 below), and the diameter of the lower portion of the tapered hole is approximately equal to an outer diameter of the air discharging pipe (as seen in the second partial illustration of Figure 2 below);



(First partial illustration of Figure 2)



(Second partial illustration of Figure 2)

Regarding claims 13-18, Yamada discloses:

- a housing (11 – cabinet) having at least one recess on an upper portion of the housing (as seen in Figures 1, 2);
- a grill cooker (3 – roasting unit) removably seated in the at least one recess (as seen in Figures 1, 2) and comprising:
 - a heating unit (W – charcoal) generating heat (inherent);
 - a grilling unit (22 – gridiron or grill) provided above the heating unit, with the food (M – broiling meat) placed on the grilling unit (as seen in Figure 2);
- at least one grilling pipe (10 – air supply pipe) with an inlet and an outlet (as seen in Figure 2);
- the air cooling unit comprising:
 - a blowing fan (12 – controllable blower) to blow air (inherent);
 - an air discharging pipe (as seen in the first partial illustration of Figure 2 above) to connect the blowing fan to the inlet of the grilling pipe, with air

entering the grilling pipe by both the blowing fan and the air discharging pipe, and then being discharged to an outside of the grilling pipe through the outlet of the grilling pipe (as seen in Figure 2);

- a cabinet (5 – outer box) that is open at a top thereof to form an opening (as seen in Figure 1);
- the cabinet contains the heating unit (as seen in Figure 2);
- the grilling unit is seated on the opening of the cabinet (as seen in Figures 1, 2);
- the air cooling unit is exteriorly provided on a lower portion of the cabinet (as seen in Figure 2);
- a connection member (14 – connecting pipe) provided on an upper portion of the cabinet to connect the air discharging pipe to the inlet of the grilling pipe (as seen in Figure 2), the connection member having a tapered hole (as seen in the first partial illustration of Figure 2 above) that is tapered in a direction from a top to a bottom of the connection member, with the inlet of the grilling pipe being connected to an upper portion of the tapered hole (as seen in the first partial illustration of Figure 2 above), and the air discharging pipe being connected to a lower portion of the tapered hole (as seen in the first partial illustration of Figure 2 above) to allow the grilling pipe to be removably connected to the air discharging pipe using the connection member (inherent);
- a depression (as seen in the illustration of Figure 2 above) on a lower surface of the recess to receive the air cooling unit of the grill cooker, with an air hole (as seen in the illustration of Figure 2 above) on a surface of the depression to draw air into the air cooling unit to allow the grilling unit to be cooled by the air when the grill cooker is set in the recess, the air cooling unit being received in the depression (as seen in Figure 2);
- the air cooling unit extends downward from the lower portion of the cabinet and is received by the depression (as seen in Figure 2).

Yamada does not disclose:

- an air cooling unit connected to the grilling unit to cool the grilling unit using air.

As aforementioned, Nishikawa discloses an air cooling unit (7 – electric-powered fan) that is connected to the grilling unit (2 – rectangular griddle) (as seen in Figures 2, 3). Nishikawa further discloses that the grilling unit (2 – rectangular griddle) is provided above the heating unit (3 – gas burner) (as seen in Figure 3).

Regarding claims 1 and 13, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing roaster of Yamada by incorporating an electric-powered fan within the apparatus, as taught by Nishikawa, for the purpose of lowering the temperature of the area surrounding the apparatus (see col. 2, lines 47 – 59).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Nishikawa.

Yamada does not disclose:

- details related to the connect between the grilling pipe and tapered hole.

Yamada does disclose:

- the inlet of the grilling pipe is inserted into the tapered hole (as seen in Figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing roaster of Yamada in view of Nishikawa by joining the air supply pipe and tapered hole in a linear fashion for aesthetic purposes.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Nishikawa as applied to claim 6 above, and in further view of Estes (U.S. 4,252,106).

Yamada in view of Nishikawa do not disclose:

- details regarding a plurality of grilling pipes, a plurality of connection members and a plurality of air discharging pipes.

Estes teaches of a tubular grate system where air is circulated through a grate (see col. 1, lines 6 – 9). Further disclosed is that the apparatus is comprised of a blower (28), plenum (26) and grates (44, 46), which are connected to the apparatus' plenum via flange receptacles (50) (as seen in Figures 1, 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing roaster of Yamada in view of Nishikawa by incorporating a plurality of grates that are connected to a plenum via a plurality of flange receptacles, as taught by Estes, for the purpose of allowing more air to be circulated throughout the apparatus.

Response to Arguments

Applicant's arguments filed 6/12/06 regarding claims 1 and 2 have been fully considered but they are not persuasive.

Regarding claim 1, the Applicant argues that the air cooling unit (7 – fan) and grilling unit (2 – rectangular griddle) of Nishikawa (U.S. 4,648,378) are not connected to one another. This argument is not persuasive; one of ordinary skill in the art would have seen that the components in question are fluidally connected to one another (as seen in Figures 2, 3). Thus, the rejection is valid and remains.

Regarding claim 1 and 2, the Applicant argues that the grilling pipe (10 – air supply pipe) of Yamada (U.S. 4,813,397) is not provided above the respective heating unit (W

– charcoal). This argument is not persuasive. Although the air supply pipe (10) is located below the charcoal (W), as seen in Figure 2, neither claim recites that the grilling pipe is provided above the heating unit. Thus, the rejection is valid and remains.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Early whose telephone number is (571) 272-3681. The examiner can normally be reached on Monday - Friday, 7am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJE
8/21/06

Michael J. Early
Patent Examiner
Art Unit 3744


CHERYL TYLER
SUPERVISORY PATENT EXAMINER

